

Claims

1. Method enabling a command to switch the measure mode to be entered in a dimension-measuring column provided with a probe tip,

5 wherein said command to switch the measure mode is entered by only making use of the position of said probe tip.

2. The method of claim 1, wherein said command to switch the measure mode is entered by pressing the probe tip against a piece to be measured during a time interval greater than a predetermined value.

10 3. The method of claim 2, wherein a measurement of the probing point is effected when the probe tip is pressed against said piece to be measured during a time interval shorter than said predetermined value.

15 4. The method of claims 2, wherein said mode switch command enables said measuring column to pass into a mode to search for the turn-back point of said piece to be measured.

20 5. The method of claim 4, wherein the status of the display of said measuring column is modified following said mode switch so as to indicate the status of the pressing force of said probe tip against said piece to be measured.

6. The method of claim 5, wherein said pressing force is indicated by means of a bar graph.

25 7. The method of claim 4, wherein said measuring column remains in said turn-back point search mode as long as a sufficient pressing force is exerted by the probe tip against the piece to be measured, said turn-back point being determined automatically within the trajectory covered by said probe tip in said search mode.

8. The method of claim 7, wherein said measurement of the turn-back point is not taken into account when said pressing force exceeds a predefined admissible interval.

5 9. The method of claim 4, wherein said turn-back point is determined as being the extreme of the vertical trajectory covered by said probe tip in said search mode.

10 10. The method of claim 4, wherein said turn-back point is validated only if the derivative of the probe tip's vertical position is close to zero at said extreme.

11. The method of claim 4, wherein the area around the turn-back point is scanned several times in succession in opposite directions without the pressing force being released,
the measured turn-back point being validated only when the vertical position of several thereof finds itself within a determined
15 interval.

12. The method of one of the claims 1, wherein an aural and/or visual signal is emitted during a said mode switch.

13. The method of claim 1, wherein said command to switch the measure mode is entered by pressing the probe tip against a piece to
20 be measured during a time interval greater than a predetermined value.

14. Method enabling a command to switch the measure mode to be entered in a height-measuring column provided with a probe tip,
said height-measuring column having a plurality of
measure modes for measuring a plurality of different parameters of a
25 piece,

wherein said command to switch the measure mode is entered by pressing said probe tip against a piece to be measured,
wherein said height measuring column remains in said

measure mode as long as a sufficient pressing force is exerted by the probe tip against the piece to be measured.

15. Method for entering a command in a dimension-measuring column provided with a probe tip,

5 said command enabling said measuring column to pass into a mode to search for the turn-back point of said piece to be measured, said command being entered only by pressing said probe tip against a piece to be measured during a time interval greater than a predetermined value.

10 16. The method of claim 15, wherein a measurement of the probing point is effected when the probe tip is pressed against said piece to be measured during a time interval shorter than said predetermined value.

15 17. Dimension-measuring column, comprising:
a probe tip designed for being brought into contact with the piece to be measured,
a displacement mechanism of said probe tip,
a measuring and displaying system that allows the position
20 of said probe tip to be determined and displayed, said measuring and displaying system being able to function according to several distinct modes,

wherein at least one of said measure modes can be selected by acting on the position of the probe tip, without any other handling operating being necessary.

25 18. The measuring column of claim 17, wherein said measure mode can be selected by pressing the probe tip against the piece to be measured during a time interval greater than a predetermined value.

19. The measuring column of claim 18, wherein the measurement of the probing point is effected when the probe tip is

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pressed against said piece to be measured during a time interval shorter than said predetermined value.

20. The measuring column of claim 19, wherein said measure mode is a mode to search for the turn-back point of said piece to be measured.

21. The measuring column of claim 20, comprising a display whose status is modified following said mode switch so as to indicate the status of the pressing force of said probe tip against said piece to be measured.

22. The measuring column of claim 21, wherein said display enables a bar graph capable of indicating said pressing force.

23. The measuring column of claim 22, wherein it remains in turn-back point search mode as long as a sufficient pressing force is exerted by the probe tip against the piece to be measured, said turn-back point being determined automatically within the trajectory covered by said probe tip in said search mode.

24. The measuring column of claim 23, wherein said measurement of the turn-back point is not taken into account when said pressing force exceeds a predefined admissible interval.

25. The measuring column of claim 24, wherein said turn-back point is determined as being the extreme of the vertical trajectory covered by said probe tip in said search mode.

26. The measuring column of one of the claims 25, wherein said turn-back point is validated only if the derivative of the probe tip's vertical position is close to zero at said extreme.

27. The measuring column of one of the claims 26, wherein, when the area around the turn-back point is scanned several times in

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29. Computer data carrier comprising a command program for measuring and displaying system in a dimension-measuring column, said program enabling the position of the probe tip of said measuring column to be determined and displayed, said program being capable of making said measuring and displaying system function according to several distinct modes,

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